



TECHNICAL GUIDE

SINGLE PIECE STANDARD ECM AIR HANDLERS

FOR USE WITH SPLIT-SYSTEM
COOLING & HEAT PUMPS

MODELS: AE SERIES



ISO 9001
Certified Quality
Management System



Due to continuous product improvement, specifications are subject to change without notice.

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WARRANTY SUMMARY

Standard 5-year limited parts warranty.

Extended 10-year limited parts warranty when product is registered online within 90 days of purchase for replacement or closing for new home construction.

DESCRIPTION

This fan coil line offers the ultimate in application flexibility. This unit may be used for upflow, downflow, horizontal right, or horizontal left applications.

All JCI Unitary Products air handlers and coils can use a TXV to provide our customers with the optimum performance and refrigerant control. Single piece air handlers are available with "Flex-coils" (without a factory installed metering device). For added flexibility, an R-22 or R-410A TXV or piston must be field installed to meet the requirement of the desired refrigerant. Some models available with factory installed TXV.

FEATURES

RC² - Rigid Case Construction interior endoskeleton for structural support, smooth side, and locks in insulation.

Powder-painted - G30 galvanized steel case provide a coated edge that resists corrosion and rust creep.

MaxAlloy™ Coil - Long life aluminum coils built to deliver lasting performance, efficiency and reliability.

Quality Construction - Structural components are made of Aluminum or G90 galvanized steel to prevent corrosion.

Improved Insulation Design - Single piece with no external screws to reduce thermal transmission paths to prevent sweating. Foil faced insulation for ease of cleaning.

Thermostatic Expansion Valve - The accessory chatleff style TXV provides easy installation to convert the indoor coil to the required refrigerant that does not require brazing to replace or install. Some models are available with factory installed TXV.

Case Depth - These models have 20.5" casing which provide ease of attic access and tight applications.

Thermoset Drain Pan - Positive slope for drainage to reduce cause for potential mold or contaminants.

Factory Sealed - Achieves 2% or less total airflow leakage rate at duct leakage test conditions in positive and negative pressure for system airflow verification.

Enhanced Filter Rack - All models have integrated internal filter racks provided for use with 1" thick standard size filters.

Electric Heat Kits - 6HK series of field installed electric heat kits are available for installation-friendly and easy service applications.

Cabinet Air Leakage - Less than 2.0% at 1.0 inch esp. when tested in accordance with ASHRAE standard 193.

Blowers - All models use direct-drive, standard ECM motors.

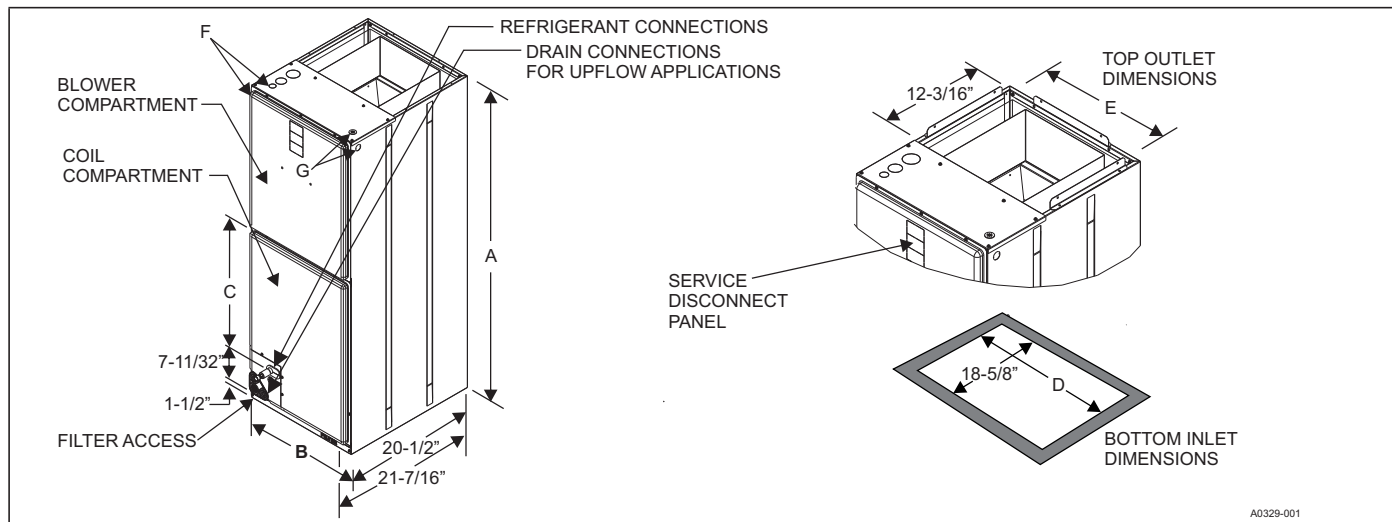
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NOMENCLATURE

PRODUCT TYPE	A	A = Single Piece Air Handler
POSITION MOTOR TYPE	E	P = Multi PSC E = Multi Std ECM V = Multi VS ECM Z = Compact Up Std ECM
OPTIONS	-	C = Communications Ready - = Standard (No Options)
NOMINAL UNIT CAPACITY	36	18 = 1.5 Ton 42 = 3.5 Ton 24 = 2 Ton 48 = 4-Ton 30 = 2.5 Ton 60 = 5-Ton 36 = 3 Ton
CABINET WIDTH	B	A = 14.5" B = 17.5" C = 21.0" D = 24.5"
TXV INDICATOR	X	BA-BF = Valve Size X = no valve
VOLTAGE (Voltage-Phase-Hertz)	2	1 = 115-1-60 3 = 208/230-3-60 2 = 208/230-1-60 4 = 460-3-60
GENERATION (MAJOR REVISION)	1	1 = 1st Gen 2 = 2nd Gen etc.
STYLE LETTER (MINOR REVISION) NOT USED FOR ORDERING	A	A = Style A B = Style B etc.

DIMENSIONS & DUCT CONNECTION DIMENSIONS



A0329-001

DIMENSIONS

Models	Dimensions ¹					Wiring Knockouts ²		Refrigerant Connections Line Size		
	A	B	C	D	E	F	G	Liquid	Vapor	
	Height	Width				Power	Control			
AE18B*21	41	17-1/2	12-7/8	14-1/4	16-1/2	7/8" (1/2") 1-3/8"(1") 1-23/32" (1-1/4")	7/8" (1/2")	3/8"	3/4"	
AE24B*21	41	17-1/2	12-7/8	14-1/4	16-1/2					
AE30B*21	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2					
AE36B*21	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2					
AE36C*21	51-1/2	21	22-5/8	17-3/4	20			7/8"	3/8"	7/8"
AE42C*21	51-1/2	21	22-5/8	17-3/4	20					
AE43C*21	51-3/4	21	26-7/8	17-3/4	20					
AE48C*21	51-1/2	21	22-5/8	17-3/4	20					
AE48D*21	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2					
AE60C*22	55-3/4	21	26-7/8	17-3/4	20					
AE60D*21	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2					

1. All dimensions are in inches.

2. Actual size (conduit size).

COIL TECHNICAL DATA

Models ¹	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fins Per In.	Coil Size	Tube Geometry	Tube Diameter	Fin Type
AE18BX21	Cooling /Heat Pump	Sweat	4.3	2	14	(3) 12 x 17.1	1 x 0.866	3/8	Sine Wave
AE18BBA21*	Cooling /Heat Pump	Sweat	4.3	2	14	(3) 12 x 17.1	1 x 0.866	3/8	Sine Wave
AE24BX21	Cooling /Heat Pump	Sweat	5.0	2	14	(3) 14 x 17.1	1 x 0.866	3/8	Sine Wave
AE24BBA21*	Cooling /Heat Pump	Sweat	5.0	2	14	(3) 14 x 17.1	1 x 0.866	3/8	Sine Wave
AE30BX21	Cooling /Heat Pump	Sweat	6.4	2	14	(3) 18 x 17.1	1 x 0.866	3/8	Sine Wave
AE30BBB21*	Cooling /Heat Pump	Sweat	6.4	2	14	(3) 18 x 17.1	1 x 0.866	3/8	Sine Wave
AE36BX21	Cooling /Heat Pump	Sweat	7.1	2	14	(3) 20 x 17.1	1 x 0.866	3/8	Sine Wave
AE36BBE21*	Cooling /Heat Pump	Sweat	7.1	2	14	(3) 20 x 17.1	1 x 0.866	3/8	Sine Wave
AE36CX21	Cooling /Heat Pump	Sweat	7.1	2	14	(3) 20 x 17.1	1 x 0.866	3/8	Sine Wave
AE36CBE21*	Cooling /Heat Pump	Sweat	7.1	2	14	(3) 20 x 17.1	1 x 0.866	3/8	Sine Wave
AE42CX21	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE42CBF21*	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE43CX21	Cooling /Heat Pump	Sweat	6.7	3	12	(2) 28 x 17.1	1 x 0.866	3/8	Sine Wave
AE48CX21	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE48CBC21*	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE48DX21	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE48DBC21*	Cooling /Heat Pump	Sweat	8.6	2	14	(3) 24 x 17.1	1 x 0.866	3/8	Sine Wave
AE60CX22	Cooling /Heat Pump	Sweat	10.0	2	14	(3) 28 x 17.1	1 x 0.866	3/8	Sine Wave
AE60CBD22*	Cooling /Heat Pump	Sweat	10.0	2	14	(3) 28 x 17.1	1 x 0.866	3/8	Sine Wave
AE60DX21	Cooling /Heat Pump	Sweat	10.0	3	12	(3) 28 x 17.1	1 x 0.866	3/8	Sine Wave
AE60DBG21*	Cooling /Heat Pump	Sweat	10.0	3	12	(3) 28 x 17.1	1 x 0.866	3/8	Sine Wave

1. * Factory-Installed TXV option.

COOLING CAPACITY¹

Models	Rated CFM ²	Entering Air Dry/Wet Bulb (°F)	MBH@ Evap. Temp. and Corresponding R-410A Pressure (°F/PSIG)			
			35/107.9	40/118.9	45/130.7	50/143.3
18B	600	85/72	45.7	41.6	36.8	30.5
		80/67	38.5	33.9	28.5	22.3
		75/62	31.5	26.5	20.5	15.9
		70/57	24.4	19.5	15.2	11.5
24B	800	85/72	52.2	47.5	41.8	35.0
		80/67	43.6	38.3	31.9	24.5
		75/62	35.2	29.5	22.7	16.2
		70/57	27.1	20.7	15.5	11.4
30B	1000	85/72	75.3	67.8	56.8	47.1
		80/67	62.6	54.6	44.2	34.5
		75/62	50.2	41.3	32.0	22.9
		70/57	37.8	30.1	21.5	16.2
36B	1200	85/72	91.6	82.4	71.3	59.4
		80/67	76.5	65.4	54.6	42.8
		75/62	61.3	51.2	40.0	30.5
		70/57	47.5	38.1	28.7	22.3
36C	1200	85/72	91.6	82.4	71.3	59.4
		80/67	76.5	65.4	54.6	42.8
		75/62	61.3	51.2	40.0	30.5
		70/57	47.5	38.1	28.7	22.3
42C	1400	85/72	108.0	98.4	88.1	73.8
		80/67	93.3	82.1	69.7	57.0
		75/62	75.9	64.4	53.1	41.9
		70/57	60.7	49.9	39.4	32.4
43C	1500	85/72	100.9	89.3	76.9	61.9
		80/67	82.7	70.7	57.6	44.1
		75/62	65.7	53.9	41.0	28.0
		70/57	50.2	38.5	27.7	21.2
48C	1600	85/72	115.2	105.0	93.9	79.0
		80/67	88.3	78.2	65.5	52.6
		75/62	72.7	60.8	50.1	37.6
		70/57	57.7	46.9	36.6	29.7
48D	1600	85/72	115.2	105.0	93.9	79.0
		80/67	88.3	78.2	65.5	52.6
		75/62	72.7	60.8	50.1	37.6
		70/57	57.7	46.9	36.6	29.7
60C	1800	85/72	115.1	103.0	91.7	78.6
		80/67	96.8	85.9	73.7	60.5
		75/62	80.7	69.4	57.5	43.5
		70/57	58.7	48.9	37.7	32.7
60D	1800	85/72	133.6	118.5	103.2	86.6
		80/67	111.4	96.2	80.3	62.8
		75/62	90.7	75.1	60.0	43.5
		70/57	70.6	56.9	42.5	32.8

1. Actual capacity varies with the outdoor A/C or H/P that is used with the system.
2. Airflow is calculated for each system tonnage.

PHYSICAL & ELECTRICAL DATA - COOLING ONLY

Models		18B	24B	30B	36B	36C	42C	43C	48C	48D	60C	60D
Blower - Diameter x Width		10 x 8	10 x 8	10 x 8	10 x 8	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10	11 x 10
Motor	HP	1/3 HP	1/3 HP	1/3 HP	1/2 HP	1/2 HP	1/2 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP
	Nominal RPM	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Voltage		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Full Load Amps @230V		2.6	2.6	2.6	3.8	3.8	3.8	5.4	5.4	5.4	5.4	5.4
Filter ¹	Type	DISPOSABLE OR PERMANENT										
	Size	16 x 20 x 1	16 x 20 x 1	16 x 20 x 1	16 x 20 x 1	20 x 20 x 1	20 x 20 x 1	20 x 20 x 1	20 x 20 x 1	22 x 20 x 1	20 x 20 x 1	22 x 20 x 1
	Permanent Type Kit	1PF0601	1PF0601	1PF0601	1PF0601	1PF0602	1PF0602	1PF0602	1PF0602	1PF0603	1PF0602	1PF0603
Shipping / Operating Weight (lbs)		91/85	93/87	119/113	119/113	120/114	144/136	158/150	158/150	163/153	156/146	180/170

1. Field supplied.

kW & MBH CONVERSIONS - FOR TOTAL POWER INPUT REQUIREMENT

For a power distribution voltage that is different than the provided nominal voltage, multiply the kW and MBH data from the table by the conversion factor in the following table.

DISTRIBUTION POWER	NOMINAL VOLTAGE	CONVERSION FACTOR
208V	240V	0.75
220V	240V	0.84
230V	240V	0.92

APPLICATION FACTORS - RATED CFM VS. ACTUAL CFM

% Of Rated Airflow (CFM)	80%	90%	100%	110%	120%
Capacity Factor	0.96	0.98	1.00	1.02	1.03

ELECTRICAL DATA - COOLING ONLY

Models	Motor FLA ¹	Minimum Circuit Ampacity	MOP ²
18B/24B/30B	2.6	3.3	15
36B/36C/42C	3.8	4.8	15
43C/48C/48D/60C/60D	5.4	6.8	15

1. FLA = Full Load Amps

2. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

ELECTRICAL HEAT - MINIMUM FAN SPEED

Heater Kit Models ^{1,2,3}	Nom. kW @240V	Air Handler Models										
		18B	24B	30B	36B	36C	42C	43C	48C	48D	60C	60D
6HK(0,1)6500206	2.4kW	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6500506	4.8kW	Med Lo (#2)	Med (#3)	Med (#3)	Med Lo (#2)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6500806	7.7kW	Med (#3)	Med Hi (#4)	Med Hi (#4)	Med Lo (#2)	Med Hi (#4)	Med (#3)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6501006 6HK36501025	9.6kW	Med (#3)	Med Hi (#4)	Med Hi (#4)	Med Lo (#2)	Med Hi (#4)	Med (#3)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501306	12.5kW	-	Med Hi (#4)	Med Hi (#4)	Med (#3)	Med Hi (#4)	Med (#3)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501506 6HK36501525	14.4kW	-	-	Med Hi (#4)	Med Hi (#4)	Med Hi (#4)	Hi (#5)	Hi (#5)	Med (#3)	Med (#3)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501806 6HK36501825	17.3kW	-	-	-	Med Hi (#4)	Med Hi (#4)	Hi (#5)	Hi (#5)	Med (#3)	Med Hi (#4)	Med (#3)	Med (#3)
6HK(1,2)6502006 6HK46502025	19.2kW	-	-	-	Med Hi (#4)	Hi (#5)	Hi (#5)	Hi (#5)	Med Hi (#4)	Hi (#5)	Med Hi (#4)	Med Hi (#4)
6HK(1,2)6502506 6HK46502525	24kW	-	-	-	-	-	-	-	-	Hi (#5)	-	Med Hi (#4)

1. (0,1) - 0 = no service disconnect OR 1 = with service disconnect.

2. (1,2) - 1 = with service disconnect, no breaker jumper bar OR 2 = with service disconnect & breaker jumper bar.

3. 6HK3 = 3-Phase with terminal block connectors only, 6HK4 = 3-Phase with service disconnect.

ELECTRIC HEAT PERFORMANCE DATA: 208/230-1-60 & 208/230-3-60

Heater Models ^{1,2,3}		Nominal kW @240V	Total Heat ⁴				kW Staging			
			kW		MBH		W1 Only		W1 + W2	
			208V	230V	208V	230V	208V	230V	208V	230V
1PH	6HK(0,1)6500206	2.4	1.8	2.2	6.2	7.5	1.8	2.2	1.8	2.2
	6HK(0,1)6500506	4.8	3.6	4.4	12.3	15	3.6	4.4	3.6	4.4
	6HK(0,1)6500806	7.7	5.8	7.1	19.7	24.1	5.8	7.1	5.8	7.1
	6HK(0,1)6501006	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	6HK(1,2)6501306	12.5	9.4	11.5	32	39.2	3.1	3.8	9.4	11.5
	6HK(1,2)6501506	14.4	10.8	13.2	36.9	45.1	3.6	4.4	10.8	13.2
	6HK(1,2)6501806	17.3	13	15.9	44.3	54.2	6.5	7.9	13	15.9
	6HK(1,2)6502006	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
6HK(1,2)6502506	24	18	22	61.5	75.2	7.2	8.8	18	22	
3PH	6HK36501025	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	6HK36501525	14.4	10.8	13.2	36.9	45.1	10.8	13.2	10.8	13.2
	6HK36501825	17.3	13	15.9	44.3	54.2	13	15.9	13	15.9
	6HK46502025	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	6HK46502525	24	18	22	61.5	75.2	9	11	18	22

- (0,1) - 0 = no service disconnect OR 1 = with service disconnect.
- (1,2) - 1 = with service disconnect, no breaker jumper bar OR 2 = with service disconnect & breaker jumper bar.
- 6HK3 = 3-Phase with terminal block connectors only, 6HK4 = 3-Phase with service disconnect.
- For different power distributions, see conversion table on Page 5.

ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY: 208/230-1-60

Air Handler Models	Heater Models ^{1,2}	Heater Amps @240V	Field Wiring			
			Min. Circuit Ampacity		MOP. ³	
			208V	230V	208V	230V
18B	6HK(0,1)6500206	10	14.1	15.2	15	20
	6HK(0,1)6500506	20	24.9	27.2	30	30
	6HK(0,1)6500806	32	38.1	41.8	40	45
	6HK(0,1)6501006	40	46.5	51.1	50	60
24B	6HK(0,1)6500206	10	14.1	15.2	15	20
	6HK(0,1)6500506	20	24.9	27.2	30	30
	6HK(0,1)6500806	32	38.1	41.8	40	45
	6HK(0,1)6501006	40	46.5	51.1	50	60
	6HK(1,2)6501306	52	59.7	65.8	60	70
30B	6HK(0,1)6500206	10	14.1	15.2	15	20
	6HK(0,1)6500506	20	24.9	27.2	30	30
	6HK(0,1)6500806	32	38.1	41.8	40	45
	6HK(0,1)6501006	40	46.5	51.1	50	60
	6HK(1,2)6501306	52	59.7	65.8	60	70
	6HK(1,2)6501506	60	68.2	75.0	70	80
36B	6HK(0,1)6500206	10	15.6	16.7	20	20
	6HK(0,1)6500506	20	26.4	28.7	30	30
	6HK(0,1)6500806	32	39.6	43.3	40	45
	6HK(0,1)6501006	40	48.0	52.6	50	60
	6HK(1,2)6501306	52	61.2	67.3	70	70
	6HK(1,2)6501506	60	69.7	76.5	70	80
	6HK(1,2)6501806	72	82.9	91.2	90	100
	6HK(1,2)6502006	80	91.3	100.4	100	110
36C	6HK(0,1)6500206	10	15.6	16.7	20	20
	6HK(0,1)6500506	20	26.4	28.7	30	30
	6HK(0,1)6500806	32	39.6	43.3	40	45
	6HK(0,1)6501006	40	48.0	52.6	50	60
	6HK(1,2)6501306	52	61.2	67.3	70	70
	6HK(1,2)6501506	60	69.7	76.5	70	80
	6HK(1,2)6501806	72	82.9	91.2	90	100
	6HK(1,2)6502006	80	91.3	100.4	100	110

Continued on next page.

ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY: 208/230-1-60 (Continued)

Air Handler Models	Heater Models ^{1,2}	Heater Amps @240V	Field Wiring			
			Min. Circuit Ampacity		MOP. ³	
			208V	230V	208V	230V
42C	6HK(0,1)6500206	10	15.6	16.7	20	20
	6HK(0,1)6500506	20	26.4	28.7	30	30
	6HK(0,1)6500806	32	39.6	43.3	40	45
	6HK(0,1)6501006	40	48.0	52.6	50	60
	6HK(1,2)6501306	52	61.2	67.3	70	70
	6HK(1,2)6501506	60	69.7	76.5	70	80
	6HK(1,2)6501806	72	82.9	91.2	90	100
	6HK(1,2)6502006	80	91.3	100.4	100	110
43C	6HK(0,1)6500206	10	17.6	18.7	20	20
	6HK(0,1)6500506	20	28.4	30.7	30	35
	6HK(0,1)6500806	32	41.6	45.3	45	50
	6HK(0,1)6501006	40	50.0	54.6	60	60
	6HK(1,2)6501306	52	63.2	69.3	70	70
	6HK(1,2)6501506	60	71.7	78.5	80	80
	6HK(1,2)6501806	72	84.9	93.2	90	100
	6HK(1,2)6502006	80	93.3	102.4	100	110
48C	6HK(0,1)6500206	10	17.6	18.7	20	20
	6HK(0,1)6500506	20	28.4	30.7	30	35
	6HK(0,1)6500806	32	41.6	45.3	45	50
	6HK(0,1)6501006	40	50.0	54.6	60	60
	6HK(1,2)6501306	52	63.2	69.3	70	70
	6HK(1,2)6501506	60	71.7	78.5	80	80
	6HK(1,2)6501806	72	84.9	93.2	90	100
	6HK(1,2)6502006	80	93.3	102.4	100	110
48D	6HK(0,1)6500206	10	17.6	18.7	20	20
	6HK(0,1)6500506	20	28.4	30.7	30	35
	6HK(0,1)6500806	32	41.6	45.3	45	50
	6HK(0,1)6501006	40	50.0	54.6	60	60
	6HK(1,2)6501306	52	63.2	69.3	70	70
	6HK(1,2)6501506	60	71.7	78.5	80	80
	6HK(1,2)6501806	72	84.9	93.2	90	100
	6HK(1,2)6502006	80	93.3	102.4	100	110
60C	6HK(0,1)6500206	10	17.6	18.7	20	20
	6HK(0,1)6500506	20	28.4	30.7	30	35
	6HK(0,1)6500806	32	41.6	45.3	45	50
	6HK(0,1)6501006	40	50.0	54.6	60	60
	6HK(1,2)6501306	52	63.2	69.3	70	70
	6HK(1,2)6501506	60	71.7	78.5	80	80
	6HK(1,2)6501806	72	84.9	93.2	90	100
	6HK(1,2)6502006	80	93.3	102.4	100	110
60D	6HK(0,1)6500206	10	17.6	18.7	20	20
	6HK(0,1)6500506	20	28.4	30.7	30	35
	6HK(0,1)6500806	32	41.6	45.3	45	50
	6HK(0,1)6501006	40	50.0	54.6	60	60
	6HK(1,2)6501306	52	63.2	69.3	70	70
	6HK(1,2)6501506	60	71.7	78.5	80	80
	6HK(1,2)6501806	72	84.9	93.2	90	100
	6HK(1,2)6502006	80	93.3	102.4	100	110
	6HK(1,2)6502506	100	114.9	126.3	125	150

1. (0,1) - 0 = no service disconnect OR 1 = with service disconnect.

2. (1,2) - 1 = with service disconnect, no breaker jumper bar OR 2 = with service disconnect & breaker jumper bar.

3. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

ELECTRICAL DATA FOR MULTI-SOURCE POWER SUPPLY: 208/230-1-60

Air Handlers Models	Heater Models ^{1,2}	Heater Amps @240V	Min. Circuit Ampacity						MOP ³					
			208V			230V			208V			230V		
			Circuit						Circuit					
			1st ³	2nd	3rd	1st ³	2nd	3rd	1st ³	2nd	3rd	1st ³	2nd	3rd
24B	6HK16501306	52	22.0	37.6	-	24.0	41.5	-	25	40	-	25	45	-
30B	6HK16501306	52	22.0	37.6	-	24.0	41.5	-	25	40	-	25	45	-
	6HK16501506	60	24.9	43.3	-	27.2	47.9	-	25	45	-	30	50	-
36B	6HK16501306	52	23.5	37.6	-	25.5	41.5	-	25	40	-	30	45	-
	6HK16501506	60	26.4	43.3	-	28.7	47.9	-	30	45	-	30	50	-
	6HK16501806	72	43.8	39.0	-	47.9	43.1	-	45	40	-	50	45	-
	6HK16502006	80	48.1	43.3	-	52.7	47.9	-	50	45	-	60	50	-
36C	6HK16501306	52	23.5	37.6	-	25.5	41.5	-	25	40	-	30	45	-
	6HK16501506	60	26.4	43.3	-	28.7	47.9	-	30	45	-	30	50	-
	6HK16501806	72	43.8	39.0	-	47.9	43.1	-	45	40	-	50	45	-
	6HK16502006	80	48.1	43.3	-	52.7	47.9	-	50	45	-	60	50	-
42C	6HK16501306	52	23.5	37.6	-	25.5	41.5	-	25	40	-	30	45	-
	6HK16501506	60	26.4	43.3	-	28.7	47.9	-	30	45	-	30	50	-
	6HK16501806	72	43.8	39.0	-	47.9	43.1	-	45	40	-	50	45	-
	6HK16502006	80	48.1	43.3	-	52.7	47.9	-	50	45	-	60	50	-
43C	6HK16501306	52	25.5	37.6	-	27.5	41.5	-	30	40	-	30	45	-
	6HK16501506	60	28.4	43.3	-	30.7	47.9	-	30	45	-	35	50	-
	6HK16501806	72	45.8	39.0	-	49.9	43.1	-	50	40	-	50	45	-
	6HK16502006	80	50.1	43.3	-	54.7	47.9	-	50	45	-	60	50	-
48C	6HK16501306	52	25.5	37.6	-	27.5	41.5	-	30	40	-	30	45	-
	6HK16501506	60	28.4	43.3	-	30.7	47.9	-	30	45	-	35	50	-
	6HK16501806	72	45.8	39.0	-	49.9	43.1	-	50	40	-	50	45	-
	6HK16502006	80	50.1	43.3	-	54.7	47.9	-	50	45	-	60	50	-
48D	6HK16501306	52	25.6	37.7	-	27.5	41.5	-	30	40	-	30	45	-
	6HK16501506	60	28.4	43.3	-	30.7	47.9	-	30	45	-	35	50	-
	6HK16501806	72	45.8	39.1	-	49.9	43.1	-	50	40	-	50	45	-
	6HK16502006	80	50.0	43.3	-	54.7	47.9	-	50	45	-	60	50	-
	6HK16502506	100	50.0	43.3	21.6	54.7	47.9	24.0	60	45	25	60	50	25
60C	6HK16501306	52	25.5	37.6	-	27.5	41.5	-	30	40	-	30	45	-
	6HK16501506	60	28.4	43.3	-	30.7	47.9	-	30	45	-	35	50	-
	6HK16501806	72	45.8	39.0	-	49.9	43.1	-	50	40	-	50	45	-
	6HK16502006	80	50.1	43.3	-	54.7	47.9	-	60	45	-	60	50	-
60D	6HK16501306	52	25.5	37.6	-	27.5	41.5	-	30	40	-	30	45	-
	6HK16501506	60	28.4	43.3	-	30.7	47.9	-	30	45	-	35	50	-
	6HK16501806	72	45.8	39.0	-	49.9	43.1	-	50	40	-	50	45	-
	6HK16502006	80	50.1	43.3	-	54.7	47.9	-	60	45	-	60	50	-
	6HK16502506	100	50.1	43.3	21.7	54.7	47.9	24.0	60	45	25	60	50	25

1. (0,1) - 0 = no service disconnect OR 1 = with service disconnect.

2. (1,2) - 1 = with service disconnect, no breaker jumper bar OR 2 = with service disconnect & breaker jumper bar.

3. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. The 1st circuit includes blower motor amps. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

ELECTRICAL DATA FOR SINGLE SOURCE POWER SUPPLY: 208/230-3-60

Air Handler Models	Heater Models ¹	Heater Amps @240V	Field Wiring			
			Min. Circuit Ampacity		MOP. ²	
			208V	230V	208V	230V
18B	6HK36501025	23.1	28.3	30.9	30	35
24B	6HK36501025	23.1	28.3	30.9	30	35
30B	6HK36501025	23.1	28.3	30.9	30	35
	6HK36501525	34.6	40.7	44.7	45	45
36B	6HK36501025	23.1	29.8	32.4	30	35
	6HK36501525	34.6	42.2	46.2	45	50
	6HK36501825	41.6	49.8	54.6	50	60
36B	6HK46502025 ³	46.2	54.8	60.1	60	70
	6HK36501025	23.1	29.8	32.4	30	35
	6HK36501525	34.6	42.2	46.2	45	50
	6HK36501825	41.6	49.8	54.6	50	60
36C	6HK46502025 ³	46.2	54.8	60.1	60	70
	6HK36501025	23.1	29.8	32.4	30	35
	6HK36501525	34.6	42.2	46.2	45	50
	6HK36501825	41.6	49.8	54.6	50	60
42C	6HK46502025 ³	46.2	54.8	60.1	60	70
	6HK36501025	23.1	29.8	32.4	30	35
	6HK36501525	34.6	42.2	46.2	45	50
	6HK36501825	41.6	49.8	54.6	50	60
43C	6HK46502025 ³	46.2	56.8	62.1	60	70
	6HK36501025	23.1	31.8	34.4	35	35
	6HK36501525	34.6	44.2	48.2	45	50
	6HK36501825	41.6	51.8	56.6	60	60
48C	6HK46502025 ³	46.2	56.8	62.1	60	70
	6HK36501025	23.1	31.8	34.4	35	35
	6HK36501525	34.6	44.2	48.2	45	50
	6HK36501825	41.6	51.8	56.6	60	60
48D	6HK46502025 ³	46.2	56.8	62.1	60	70
	6HK46502525 ³	57.7	69.3	75.9	70	80
	6HK36501025	23.1	31.8	34.4	35	35
	6HK36501525	34.6	44.2	48.2	45	50
	6HK36501825	41.6	51.8	56.6	60	60
60C	6HK46502025 ³	46.2	56.8	62.1	60	70
	6HK36501025	23.1	31.8	34.4	35	35
	6HK36501525	34.6	44.2	48.2	45	50
	6HK36501825	41.6	51.8	56.6	60	60
60D	6HK46502025 ³	46.2	56.8	62.0	60	70
	6HK46502525 ³	57.7	69.3	75.9	70	80
	6HK36501025	23.1	31.8	34.4	35	35
	6HK36501525	34.6	44.3	48.2	45	50
	6HK36501825	41.6	51.9	56.7	60	60

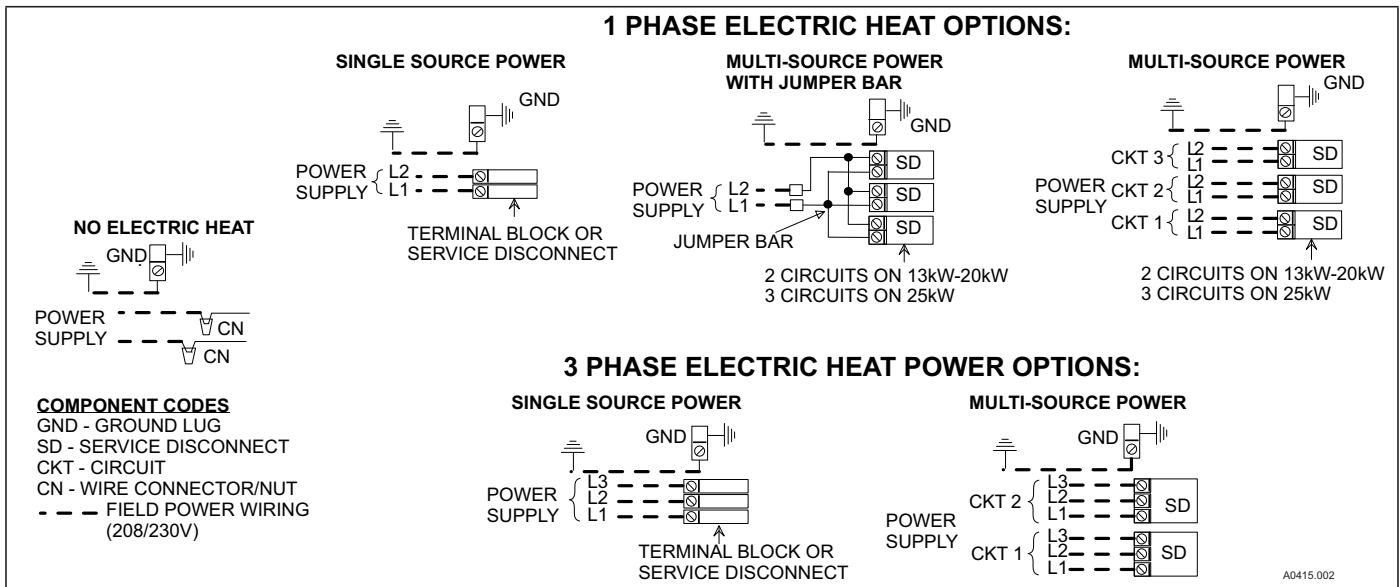
1. 6HK3 = 3-Phase with terminal block connections only, 6HK4 = 3-Phase with service disconnect.
2. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. The 1st circuit includes blower motor amps. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.
3. The 20kW and 25kW heater models (6HK46502025 and 6HK46502525) come with service disconnects standard. Single source power MCA and MOP requirements are given here only for reference if used with field installed single point power modification.

ELECTRICAL DATA FOR MULTI-SOURCE POWER SUPPLY: 208/230-3-60

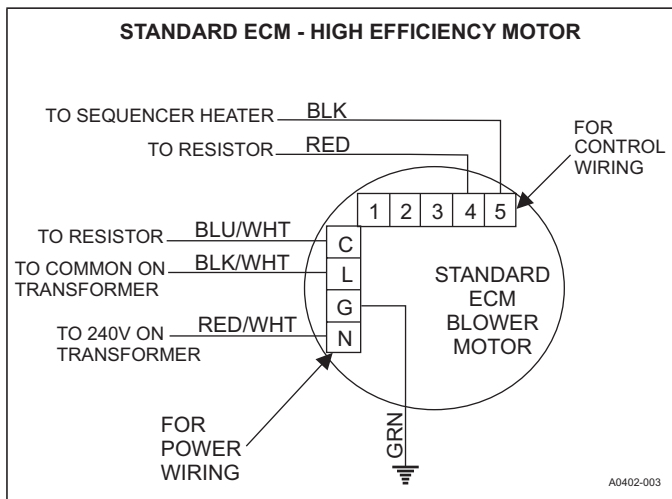
Air Handlers Models	Heater Models ¹	Heater Amps @240V	Min. Circuit Ampacity				MOP ²			
			208V		230V		208V		230V	
			Circuit				Circuit			
			1st ²	2nd	1st ²	2nd	1st ²	2nd	1st ²	2nd
36B	6HK46502025	46.2	29.8	25.0	32.4	27.6	30	25	35	30
36C	6HK46502025	46.2	29.8	25.0	32.4	27.6	30	25	35	30
42C	6HK46502025	46.2	29.8	25.0	32.4	27.6	30	25	35	30
43C	6HK46502025	46.2	31.8	25.0	34.4	27.6	35	25	35	30
48C	6HK46502025	46.2	31.8	25.0	34.4	27.6	35	25	35	30
48D	6HK46502025	46.2	31.8	25.0	34.4	27.6	35	25	35	30
	6HK46502525	57.7	38.0	31.3	41.3	34.6	40	35	45	35
60C	6HK46502025	46.2	31.8	25.0	34.4	27.6	35	25	35	30
60D	6HK46502025	46.2	31.8	25.0	34.4	27.6	35	25	35	30
	6HK46502525	57.7	38.0	31.3	41.3	34.6	40	35	45	35

1. The 20kW and 25kW heater models (6HK46502025 and 6HK46502525) come with service disconnects standard.
2. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. The 1st circuit includes blower motor amps. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

POWER WIRING - LINE CONNECTIONS



BLOWER SPEED CONNECTIONS



ACCESSORIES

Refer to Price Manual for specific model numbers where not shown.

TXV Kits - Air handlers are shipped with “Flex-coils” without a factory installed metering device. For added flexibility, an R-22 or R-410A TXV or piston can be field installed to meet your refrigerant choice. All TXV kits are chatleff style and require no brazing to install. Some models are available with a factory installed TXV.

Electric Heaters - 6HK models shown under electrical data include sequential operation and temperature dual limit switches for safe, efficient operation. Service disconnects are provided where shown.

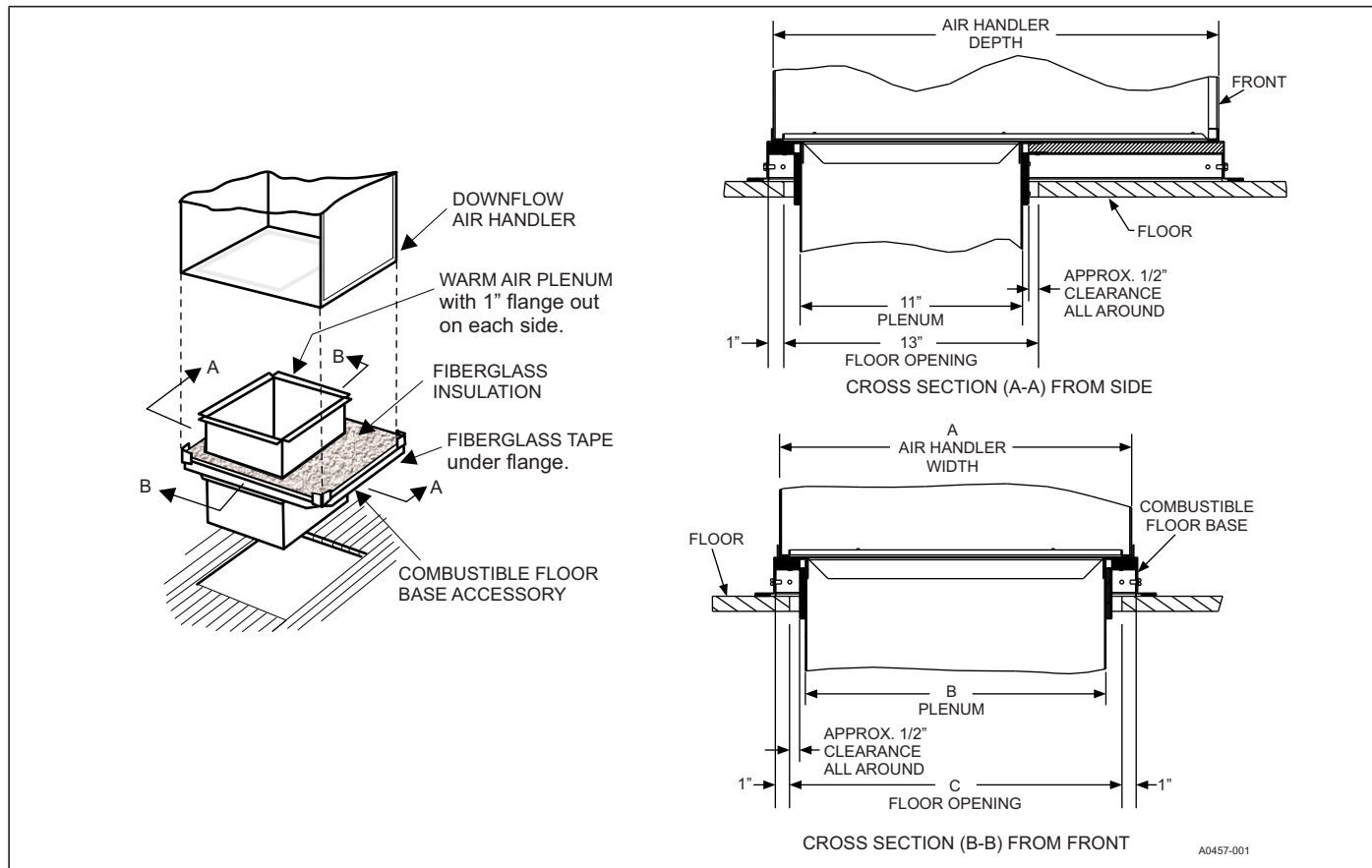
SINGLE SOURCE POWER ACCESSORIES (SINGLE PHASE)	
S1-02435670000	For heat kits with 2 service disconnects.
S1-02435671000	For heat kits with 3 service disconnects.
SINGLE SOURCE POWER ACCESSORY (THREE PHASE)	
S1-32436041000	Contains a terminal block and wiring to connect service disconnects together.

Combustible Floor Base Accessory - If an electric heat accessory which is rated for greater than zero clearance to combustible surfaces is installed in these air handlers in the downflow operating positions on a combustible floor, one of the following combustible floor base accessory models is required: S1-1FB1917, S1-1FB1921, S1-1FB1924.

Breaker Moisture Seal Accessory - A clear circuit breaker moisture barrier seals the breakers from humidity and dust. The flexibility of the clear cover allows circuit breakers to be turned ON or OFF without removing the cover. The cover firmly attaches to the access panel around the circuit breakers with the use of double backed adhesive tape. To ensure that moisture or dust does not contaminate circuit breakers, an S1-02435672000, Circuit Breaker, Cover Seal may be ordered.

Thermostat - Compatible thermostat controls are available through accessory sourcing. For optimum performance, these outdoor units are fully compatible with our York touch screen thermostat with proprietary (patent-pending) hexagon interface. For more information, see the thermostat section of the Product Equipment Catalog.

COMBUSTIBLE FLOOR BASE ACCESSORY



Floor Base Models	Used with	Dimensions		
		A	B	C
1FB1917	18B, 24B, 30B, 36B	17.5	14.0	16.0
1FB1921	36C, 42C, 48C, 60C	21.0	17.5	19.5
1FB1924	48D, 60D	24.5	21.0	23.0

LIMITATIONS

These units must be wired and installed in accordance with all national and local safety codes.

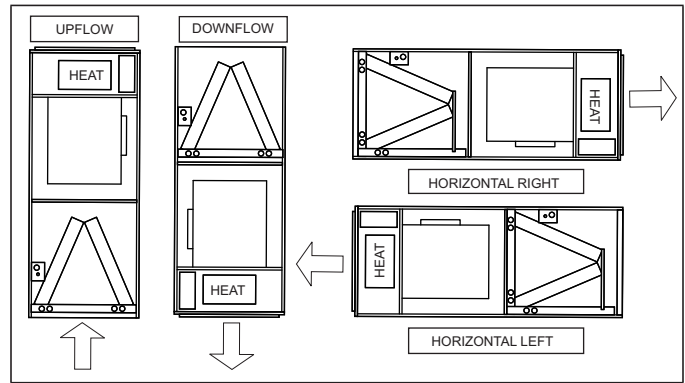
Voltage limits are as follows:

Air Handler Voltage	Voltage code	Normal Operating Voltage Range ¹
208/230-1-60	06	187-253

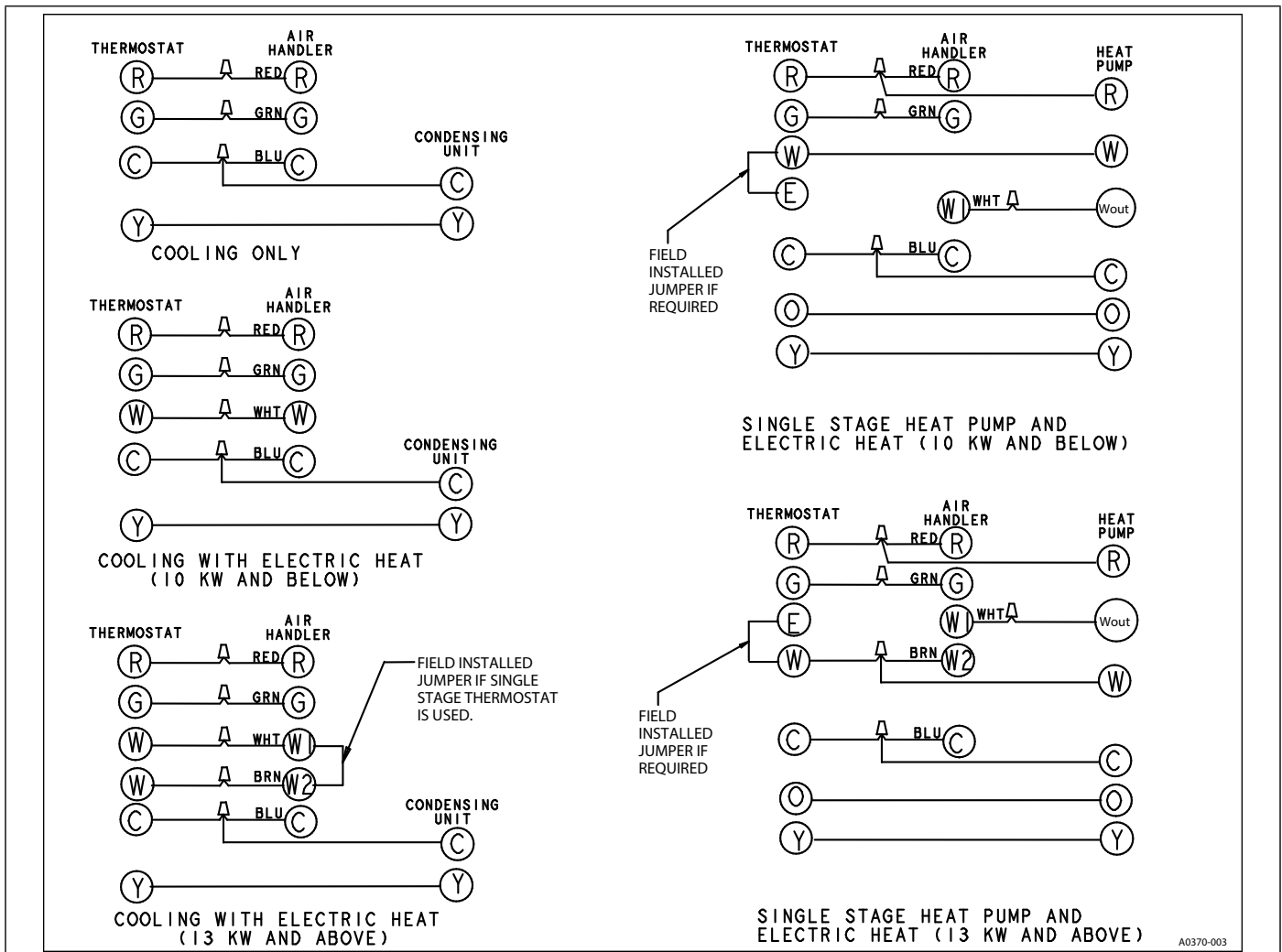
1. Rated in accordance with ARI Standard 110, utilization range "A".

Airflow must be within the minimum and maximum limits approved for electric heat, evaporator coils and outdoor units.

TYPICAL APPLICATIONS



TYPICAL THERMOSTAT CONNECTION



A0370-003

AIR FLOW DATA (CFM)¹

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
18B	#5 HI	1132	1107	1074	1053	1023	990	955
	#4 MED-HI	1025	994	971	943	912	878	803
	#3 MED	821	798	764	727	657	599	536
	#2 MED-LO	661	632	572	491	414	335	279
	#1 LO	510	435	365	291	181	147	23
24B	#5 HI	1117	1078	1061	1034	1007	985	955
	#4 MED-HI	1032	1001	975	946	928	898	872
	#3 MED	838	799	768	742	698	634	582
	#2 MED-LO	644	620	582	521	440	378	284
	#1 LO	474	421	336	279	187	144	70
30B	#5 HI	1113	1083	1057	1034	1007	977	941
	#4 MED-HI	1057	1021	1000	977	947	914	881
	#3 MED	857	821	794	768	728	653	601
	#2 MED-LO	675	641	607	533	460	408	345
	#1 LO	489	457	386	324	261	209	158
36B	#5 HI	1323	1287	1264	1238	1210	1177	1149
	#4 MED-HI	1255	1222	1193	1170	1140	1113	1081
	#3 MED	1052	1025	992	967	927	857	811
	#2 MED-LO	855	823	799	739	691	637	572
	#1 LO	653	622	574	507	463	411	353
36C	#5 HI	1562	1531	1496	1453	1416	1381	1348
	#4 MED-HI	1277	1240	1206	1165	1133	1083	1025
	#3 MED	1078	1043	996	957	899	819	770
	#2 MED-LO	881	836	810	749	658	578	537
	#1 LO	707	677	595	524	451	405	346
42C	#5 HI	1594	1564	1530	1497	1459	1424	1382
	#4 MED-HI	1442	1408	1374	1338	1298	1251	1199
	#3 MED	1249	1215	1179	1135	1082	1016	956
	#2 MED-LO	1048	1008	962	905	840	761	683
	#1 LO	881	833	786	708	623	540	481
43C	#5 HI	1743	1711	1675	1643	1607	1572	1528
	#4 MED-HI	1464	1425	1390	1353	1317	1272	1224
	#3 MED	1259	1221	1178	1137	1088	1043	947
	#2 MED-LO	1069	1031	978	924	865	760	704
	#1 LO	825	782	727	621	566	519	470
48C	#5 HI	1759	1719	1685	1644	1611	1578	1540
	#4 MED-HI	1684	1639	1606	1569	1536	1489	1452
	#3 MED	1511	1460	1427	1388	1347	1308	1262
	#2 MED-LO	1305	1260	1212	1178	1121	1076	1027
	#1 LO	1123	1068	1029	985	909	793	769
48D	#5 HI	1774	1726	1684	1651	1614	1574	1529
	#4 MED-HI	1709	1668	1619	1580	1548	1499	1459
	#3 MED	1484	1436	1410	1372	1321	1284	1237
	#2 MED-LO	1295	1254	1218	1167	1114	1069	1005
	#1 LO	1102	1051	1011	962	890	831	766
60C	#5 HI	1964	1930	1897	1858	1823	1789	1752
	#4 MED-HI	1889	1855	1818	1791	1747	1716	1668
	#3 MED	1693	1652	1627	1584	1551	1510	1462
	#2 MED-LO	1486	1450	1411	1375	1335	1291	1252
	#1 LO	1292	1247	1207	1172	1123	1055	990
60D	#5 HI	1907	1871	1835	1796	1762	1723	1681
	#4 MED-HI	1851	1816	1774	1742	1699	1659	1616
	#3 MED	1648	1608	1569	1530	1492	1445	1404
	#2 MED-LO	1456	1416	1371	1333	1289	1227	1163
	#1 LO	1261	1221	1172	1120	1055	998	949

1. Air handler units have been tested to UL 1995 / CSA 22.2 No.236 standards up to 0.50" wc. external static pressure.

Dry coil conditions only, tested without filters.

For optimal performance, external static pressures of 0.2" to 0.5" are recommended. Heating applications tested at 0.50" w.c. esp.

Airflow data shown is from testing performed at 230V. AE units use a standard ECM constant torque motor, and there is minimal variation of airflow at other distribution voltage values. The above data can be used for airflow at other distribution voltages.

NOTES